

REMARKS

After entry of this amendment, claims 1-11, 14-21, and 23-27 are pending, of which claims 2-11, 15, and 24-25 are withdrawn. Claims 1, 2, 14-21, and 23 have been amended and claim 22 is cancelled without prejudice or disclaimer. Support for the amendments is found *inter alia* in the original claims. The non-elected sequences of claims 1 and 14 are cancelled without prejudice or disclaimer. Support for the amendment to claims 1 and 14 is found in the specification at page 6 line 15 through page 7 line 33, and page 9 lines 14-36. Support for part iii) of claims 1 and 14 is found in the specification at page 9, lines 25-39, and for part iv) at page 18, lines 29-35. Claims 2 and 15 have been amended for proper antecedent basis. Amended claim 21 finds support in original claim 22 and in the specification at page 5, lines 16-23, and page 30, lines 5-8. New claims 26 and 27 find support in part c) of original claim 1 part c) of original claim 14 and are consistent with the restriction requirement. No new matter has been added.

Claim Objections

The non-elected sequences have been deleted in claims 1 and 14 without prejudice or disclaimer. In light of the amendments, the objection is believed to be rendered moot.

Rejections under 35 U.S.C. § 101

The Examiner rejects claims 21-23 for the term "transgenic organism." In light of the amendments, the rejection is believed to be rendered moot and is respectfully requested to be withdrawn.

Rejections Under 35 U.S.C. § 112, Second Paragraph

The Examiner rejected for indefiniteness part c) of claim 1. The subject matter of part c) of claim 1 has been cancelled and can be found in new claim 26.

Claims 1 and 14 were rejected for the term "essentially." As amended the claims do not recite "essentially."

The Examiner additionally finds the recitation of "functional equivalent" unclear. Applicants respectfully disagree. "Functional equivalent" is described in the specification for example at page 6, lines 9-21, and page 9 lines 14-39. "Functional equivalent fragments" are described in the specification at page 18, lines 29-44, and furthermore exemplified in SEQ ID NO: 3 as recited in claims 2 and 15. However, in order to expedite prosecution, present claims 1 and 14 do not recite "functional equivalent." Reconsideration and withdrawal of the rejection is respectfully requested.

Claim 1 has also been amended to recite the method steps in active form as requested by the Examiner.

In view of the amendments, the rejections as to claims 16-19, 20, 21 and 23 are believed to be rendered moot and are respectfully requested to be withdrawn.

Rejections under 35 U.S.C. § 112, first paragraph

Claims 1 and 14 were rejected under 35 U.S.C. § 112, first paragraph, for lack of an enabling disclosure. Applicants thank the Examiner for clarifying that the enablement rejection is based on the alleged lack of a positive recitation of expression. Claim 1 recites in part III that "at least one of the further nucleic acid sequences is expressed in nonreproductive floral tissues." Claim 14 as amended recites that the promoter targets "expression of the further nucleic acid sequence in nonreproductive floral tissues of plants." Furthermore, expression in nonreproductive floral tissues is to be understood as explained in the specification at page 6 line 15 through page 7 line 33. Therefore, claims 1 and 14 recite targeted transgenic expression. Reconsideration and withdrawal of the rejection is respectfully requested.

The Examiner has incorrectly interpreted claim 17 as reciting a self-regulatory feedback nucleic acid. Claim 17 has been amended for clarification and recites that the further nucleic acid sequence can encode a protein or transcribe an RNA. In view of the amendments, reconsideration and withdrawal of the rejection is respectfully requested.

Rejections under 35 U.S.C. § 102(b)

Claims 14, 16-17 and 20-23 were rejected under 35 U.S.C. § 102(b) as being anticipated by *Axelos et al.* (hereinafter "Axelos") and GenBank ATU63815. Applicants respectfully disagree and traverse.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegall Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987). "[T]o hold that a prior art reference anticipates a claim, the Board must expressly find that every limitation in the claim was identically shown in the single reference." *Gechter v. Davidson*, 116 F.3d 1454, 1460 (Fed. Cir. 1997).

Applicants respectfully submit that Axelos and GenBank ATU63815 do not anticipate the present invention for the following reasons.

The Examiner alleges that Axelos teaches functional equivalents of SEQ ID NO: 1, as well as SEQ ID NO: 1 based on GenBank ATU63815, an expression vector comprising said sequence, and transformation of *Arabidopsis*. The claims as amended do not recite "functional equivalents." Furthermore, Axelos does not teach SEQ ID NO: 1, does not teach targeted transgenic expression, and does not teach a transgenic expression cassette where the promoter targets expression of a heterologous nucleic acid sequence in nonreproductive floral tissues of plants as required by the present claims.

Furthermore, GenBank ATU63815 provides a genomic sequence for *Arabidopsis thaliana* without any indication that the sequence of the present invention is a promoter or is a promoter which targets expression of a heterologous nucleic acid sequence in nonreproductive floral tissues. Although SEQ ID NO: 1 may correspond to approximately positions 8263 to 10301 of the genomic sequence in GenBank ATU63815, this part of the genomic sequence is not annotated and does not describe a promoter region nor a promoter which targets expression of a heterologous nucleic acid sequence in nonreproductive floral tissues. Furthermore, GenBank ATU63815 does not disclose an expression cassette comprising SEQ ID NO: 1 or any promoter as is required by the present claims.

Because Axelos does not disclose every limitation of the claims, Axelos, even viewed with the disclosure of GenBank ATU63815, does not disclose every limitation of the claims. Reconsideration and withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 1, 14, and 16-23 were rejected under 35 U.S.C. § 103 as being obvious over Harada *et al.* (hereinafter "Harada") in view of Axelos and GenBank ATU63815, in view of Roessler *et al.* (hereinafter "Roessler"), and further in view of Koes *et al.* (hereinafter "Koes"). Applicants respectfully disagree and traverse the rejection.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. See MPEP § 2143.03.

The Examiner acknowledges that Harada does not teach a method for targeted expression of a polynucleotide to nonreproductive floral tissues of plants with an expression cassette comprising the promoter of SEQ ID NO: 1. Nevertheless, the Examiner argues that the promoters taught in Harada would inherently be functional equivalents or functional equivalent fragments of SEQ ID NO: 1 based on the alleged broad definition of functional equivalents. The Examiner also argues that Axelos teaches functional equivalents of SEQ ID NO: 1 and SEQ ID NO: 1 from GenBank ATU63815. The present claims as amended do not recite "functional equivalents." Furthermore, as admitted by the Examiner, Harada does not teach targeted expression as recited in the claims. Axelos and GenBank ATU63815 do not remedy this deficiency as explained above, because they also do not disclose a method for targeted expression nor a transgenic expression cassette as presently claimed. Thus, Harada, Axelos, and GenBank ATU63815 do not teach or suggest all the claim limitations of independent claims 1 and 14. The Examiner relies on Roessler and Koes for teaching genes recited in dependent claims 18 and 19. Thus, neither Roessler nor Koes, alone or in combination, remedy the deficiencies of Harada, Axelos, and GenBank ATU63815.

Furthermore, because all the limitations of independent claims 1 or 14 are not taught or suggested by the references cited by the Examiner, Harada, Axelos, GenBank ATU63815, Roessler, and Koes cannot render claims 1 or 14 obvious. Furthermore, if an independent claim

is nonobvious then any claim dependent therefrom is nonobvious. See *In re Fine*, 837 F.2d 1071, 1076 (Fed. Cir. 1988). Claim 26 is dependent on claim 1 and claims 16-21, and 23 are dependent, either directly or indirectly, on claim 14, and are thus likewise nonobvious.

Reconsideration and withdrawal of this rejection is respectfully requested.

CONCLUSION

For at least the above reasons, Applicants respectfully request withdrawal of the rejections and allowance of the claims.

Accompanying this response is a petition for a three-month extension of time to and including May 30, 2007 to respond to the Office Action mailed November 30, 2006 with the required fee authorization. No further fee is believed due. However, if an additional fee is due, the Director is authorized to charge our Deposit Account No. 03-2775, under Order No. 13173-00009-US from which the undersigned is authorized to draw.

Respectfully submitted,

By 

Roberte M. D. Makowski

Registration No.: 55,421

CONNOLLY BOVE LODGE & HUTZ LLP

1007 North Orange Street

P.O. Box 2207

Wilmington, Delaware 19899

(302) 658-9141

(302) 658-5614 (Fax)

Attorney for Applicants

503953